

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003923**Date Inspected:** 20-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2230**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Chih-Ming**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Various (see below)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG bay 1

QA observed ZPMC personnel performing a variety of tasks relative to the fabrication of the OBG deck panels which included the following:

Fitting u-ribs to deck panel DP-335-001, bending u-ribs in press break and weld clean up

QA noted that ZPMC has completed the u-rib to deck plate PJP welding on deck panel DP-335-002 on gantry 2 and is Magnetic particle Testing (MT'ing) the u-rib to deck plate PJP tack welds on DP-416-001 and currently has this deck panel clamped to Gantry 1 table.

OBG bay 2

No CT work in this bay

OBG bay 3

QA observed ZPMC is performing a variety of tasks relative to the fabrication of the OBG side and bottom

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panels including the following:

Fit and weld stiffeners to panels and bevel prep of various side and bottom panels. FCAW welding stiffeners to side panel SP-788-001 on gantry 2.

OBG bay 4

QA observed ZPMC performing a variety of tasks relative to the fabrication of the SAS tower diaphragms and OBG side and bottom panels including the following:

Fit and weld stiffeners on side and bottom panels, welding tower diaphragms and tower diaphragm bevel prep.

OBG bay 7

QA observed ZPMC is performing a variety of tasks relative to the fabrication of OBG floor beams including the following:

Fit and weld stiffeners and flanges to floor beam webs, weld clean up and parts preparation.

OBG bay 8

QA observed ZPMC is performing a variety of tasks relative to the fabrication of OBG floor beams and tower diaphragms including the following:

Weld stiffeners and flanges to floor beam webs. Weld clean up and parts preparation. Drill holes in tower double diaphragm.

OBG assembly bay 2

QA observed ZPMC is performing a variety of tasks relative to the fabrication of the OBG segments including the following:

Ultrasonic Testing (UT'ing) of repaired tack areas where crack like indications were discovered by Caltrans QA using the Phased Array Ultrasonic Testing (PAUT) method on u-rib to deck plate Partial Joint Penetration (PJP) welds on DP-006-001.

QA observed ZPMC qualified welding personnel FCAW external diaphragm to DP-030-001.

QA observed ZPMC qualified welding personnel perform FCAW R1 repairs on PJP u-rib to deck plate tack areas where crack like indications were discovered by Caltrans QA using the (PAUT) method on u-rib to deck plate (PJP) welds on DP-001-001. ZPMC QC was observed by QA MT'ing the repaired area excavations and weld interpasses on same deck panel.

QA observed ZPMC personnel fitting corner assembly diaphragms identified as CSD2-PP030 to DP-26A.

NOTE: Due to foul weather and ZPMC ferry delays QA did not arrive to Changxing Island until 21:15 via ZPMC tug boat.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
